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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/826,783      | 04/16/2004  | Jeffrey M. Wilkinson | 304-0002US          | 1283             |

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EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT PAPER NUMBER

3672

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/826,783 | <b>Applicant(s)</b><br>WILKINSON, JEFFREY M. |  |
|                              | <b>Examiner</b><br>Jennifer H. Gay   | <b>Art Unit</b><br>3672                      |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-7 and 20-50 is/are allowed.
- 6) ☒ Claim(s) 8-10 and 13-19 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8-10, 13-15, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Nierode (US 6,186,230).

*Regarding claim 8:* Nierode discloses a method for stimulating an earth formation where the formation includes a plurality of intermediate zones and a casing through the zone; each of the zones has a fracture gradient and the casing is perforated (4:40-50).

The method involves the following steps (3:37-41, 49-66):

- Pumping fluid into the casing to initiate hydraulic treatment of a first zone that has a first gradient.
- Using a first instant shut-in pressure (5:15-20) to determine the first gradient.
- Diverting the fluid into a second zone using diverters to block the fluid from the first zone.
- Pumping fluid into the casing to initiate hydraulic treatment of the second zone having a second gradient.
- Using a second instant shut-in pressure to determine the second gradient.
- Dislodging the diverters from the first zone.
- Hydraulically stimulating the zones.
- Determining if the fluid has been diverted from the first portion to the second and if the fluid has been diverted, treating the next zone (11:19-24).

*Regarding claims 13-15:* The diverters are ball sealers that are used to block the perforations in the respective zones. The step of dislodging the diverter involves unseating the ball sealers.

*Regarding claim, 9:* The fluid used in the above method is one of the listed fluids as the list includes a wide variety of fluids commonly used in wellbore fracturing treatments.

*Regarding claims 17, 18:* The above method further involves determining if the fluid has been diverted from the first portion to the second and if the fluid has been diverted, treating the next zone.

*Regarding claim 10:* The first gradient is inherently at least equal to the fracture gradient of the formation.

### ***Allowable Subject Matter***

3. Claims 1, 3-7, and 20-50 are allowed.
4. Claims 11, 12, 16, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

5. In view of applicant's amendment, the objections to the drawings, abstract, and claims as well as the 35 USC 112(2) rejection of claims 16 and 20-30 have been withdrawn.
6. Applicant's arguments filed October 28 2005 have been fully considered but they are not persuasive.

Applicant has argued that Nierode does not teach treating portions of a formation regardless of their location in the formation. While the examiner agrees that Nierode specifically discloses designing the order in which portions of a formation are treated, the claim does not indicate that the portions are chosen regardless of location relative to other formations or are chosen without regard to any particular order. Nierode's method can be

Art Unit: 3672

used on any portion of any formation regardless of its "location" in the wellbore thus meets this limitation of claim 8.

Applicant has argued that Nierode does not disclose determining if fluid is substantially diverted from the above portions before treating a successive portion regardless of its location in the formation. The examiner disagrees and notes that column 11, lines 19-24 indicate that this must be determined prior to fracturing the next formation in order to prevent premature fracturing of successive formations.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

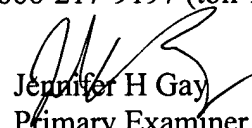
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer H Gay  
Primary Examiner  
Art Unit 3672

JHG   
November 29, 2005